

PTO/SB/08A (10-01) Approved for use through 10/31/2002,OMB 0651-0031

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Sub	ostitute for form 1449A/P1	ro		Complete if Known		
				Application Number	10/055797	
11	NFORMATIC	N DISC	LOSURE	Filing Date	January 22, 2002	
l s	STATEMENT	BY AP	PLICANT	First Named Inventor	David Beach	
i				Art Unit	1638	
	(use as many	sheets as nec	essary)	Examiner Name	Not Yet Assigned	
Sheet	1	of	5	Attorney Docket Number	GNCA-P03-007	

U.S. PATENT DOCUMENTS								
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant	Pages, Columns, Lines, Where Relevant			
Initials*	No.1	Number-Kind Code ² (if known)	MM-DD-YYYY	of Cited Document	Passages or Relevant Figures Appear			
	AA	6,326,193	12-04-2001	Liu et al.				

		FOREI	GN PATENT	DOCUMENTS		
Examiner	Foreign Patent Document Publication Pate		Foreign Patent Document Publication Date Name of Patentee or		Pages, Columns, Lines, Where Relevant	
Initials*	No.1	Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T ⁶
	AB	WO 01/36646	05-25-2001	Cancer Res. Campaign Tech.		
	AC	WO 01/48183	07-05-2001	Devgen NV		T
	AD	WO 01/75164	10-11-2001	Whitehead Inst. Biomed. Res.		T
	AE	WO 02/44321	06-06-2002	Max-Planck-Gesellschaft		
	AF	WO 02/059300	08-01-2002	J & J Res. Pty Ltd		
	AG	WO 02/068635	09-06-2002	Novartis		

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¹ Applicant's unique citation designation number (optional). ² See attached Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	AH	Bass, B.L. Double-Stranded RNA as a Template for Gene Silencing. <i>Cell</i> 101, 235-238 (2000).	
	Ai	Baulcombe, D.C. RNA as a target and an initiator of post-transcriptional gene silencing in transgenic plants. <i>Plant Mol. Biol.</i> 32, 79-88 (1996).	
-11	AJ	Baulcombe, D.C. Gene silencing: RNA makes RNA makes no protein. <i>Curr. Biol.</i> 9, R599-R601 (1999).	
!	AK	Bohmert, K. et al. AGO1 defines a novel locus of Arabidopsis controlling leaf development. EMBO J. 17, 170-180 (1998).	
	AL	Bosher, J.M. et al. RNA Interference Can Target Pre-mRNA: Consequences for Gene Expression in a Caenorhabditis elegans Operon. <i>Genetics</i> 153, 1245-1256 (Nov. 1999).	
	AM	Bosher, J.M. & Labouesse, M. RNA interference: genetic wand and genetic watchdog. <i>Nat. Cell Biol.</i> 2, E31-36 (2000).	
	AN	Catalanotto, C. et al. Gene silencing in worms and fungi. Nature 404, 245 (2000).	

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AO	Cogoni, C. & Macino, G. Gene silencing in Neurospora crassa requires a protein homologous to RNA-dependent RNA polymerase. <i>Nature</i> 399, 166-169 (1999).	
AP	Cogoni, C. & Macino, G. Posttranscriptional Gene Silencing in Neurospora by a RecQ DNA Helicase. <i>Science</i> 286, 2342-2344 (1999).	 .
AQ	Connelly, J.C. & Leach, D.R. The sbcC and sbcD genes of Escherichia coli encode a nuclease involved in palindrome inviability and genetic recombination. <i>Genes Cell</i> 1, 285-291 (1996).	
AR	Dalmay, T. et al. An RNA-Dependent RNA Polymerase Gene in Arabidopsis is Required for Posttranscriptional Gene Silencing Mediated by a Transgene but Not by a Virus. <i>Cell</i> 101, 543-553 (2000).	
AS	Di Nocera, P.P. & Dawid, I.B. Transient expression of genes introduced into cultured cells of Drosophila. <i>PNAS</i> 80, 7095-7098 (1983).	
AT	Fagard, M. et al. AG01, QDE-2, and RDE-1 are related proteins required for post-transcriptional gene silencing in plants, quelling in fungi, and RNA interference in animals. <i>PNAS</i> 97, 11650-11654 (10 Oct. 2000).	
AU	Fire, A. RNA-triggered gene silencing. <i>Trends Genet.</i> 15, 358-363 (1999).	
AV	Fire, A. et al. Potent and specific genetic interference by double-stranded RNA in Caenorhabditis elegans. <i>Nature</i> 391, 806-811 (1998).	
AW	Fortier, E. & Belote, J.M. Temperature-Dependent Gene Silencing by an Expressed Inverted Repeat in Drosophila. <i>Genesis</i> 26, 240-244 (2000).	
AX	Gillespie, D.E. & Berg, C.A. homeless is required for RNA localization in Drosophila oogenesis and encodes a new member of the DE-H family of RNA-dependent ATPases. <i>Genes Dev.</i> 9, 2495-2508 (1995).	
AY	Guo, S. & Kemphues, K.J. par-1, a Gene Required for Establishing Polarity in C. elegans Embryos, Encodes a Putative Ser/Thr Kinase that is Asymmetrically Distributed. <i>Cell</i> 81, 611-620 (1995).	
AZ	Hamilton, J.A. & Baulcombe, D.C. A Species of Small Antisense RNA in Posttranscriptional Gene Silencing in Plants. <i>Science</i> 286, 950-952 (1999).	
ВА	Hammond, S.M. et al. An RNA-directed nuclease mediates post-transcriptional gene silencing in Drosophila cells. <i>Nature</i> 404, 293-296 (2000).	
ВВ	Hunter, C. Genetics: A touch of elegance with RNAi. Curr. Biol. 9, R440-R442 (1999).	
BC	Jacobsen, S.E. et al. Disruption of an RNA helicase/RNAse III gene in Arabidopsis causes unregulated cell division in floral meristems. <i>Development</i> 126, 5231-5243 (1999).	
BD	Jones, A.L. et al. De novo methylation and co-suppression induced by a cytoplamically replicating plant RNA virus. <i>EMBO J.</i> 17, 6385-6393 (1998).	

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BE	Jones, L. et al. RNA-DNA Interactions and DNA Methylation in Post-Transcriptional Gene Silencing. <i>Plant Cell</i> 11, 2291-2301 (Dec. 1999).	
BF	Kalejta, R.F. et al. An Integral Membrane Green Fluorescent Protein Marker, Us9-GFP, is Quantitatively Retained in Cells during Propidium Iodide-Based Cell Cycle Analysis by Flow Cytometry. Exp. Cell. Res. 248, 322-328 (1999).	
BG	Kennerdell, J.R. & Carthew, R.W. Use of dsRNA-Mediated Genetic Interference to Demonstrate that frizzled and frizzled 2 Act in the Wingless Pathway. <i>Cell</i> 95, 1017-1026 (1998).	
ВН	Kennerdell, J.R. & Carthew, R.W. Heritable gene silencing in Drosophila using double-stranded RNA. <i>Nat. Biotechnol.</i> 17, 896-898 (2000).	
Ві	Ketting, R.F. et al. mut-7 of C. elegans, Required for Transposon Silencing and RNA Interference, Is a Homolog of Werner Syndrome Helicase and RNaseD. <i>Cell</i> 99, 133-141 (1999).	
BJ	Kramer, E.R. et al. Activation of the human anaphase-promoting complex by proteins of the CDC20/Fizzy family. <i>Curr. Biol.</i> 8, 1207-1210 (1998).	
BK	Lam, G. & Thummel, C.S. Inducible expression of double-stranded RNA directs specific genetic interference in Drosophila. <i>Curr. Biol.</i> 10, 957-963 (2000).	
BL	Lohmann, J.U. et al. Silencing of Developmental Genes in Hydra. <i>Dev. Biol.</i> 214, 211-214 (1999).	
ВМ	Matsuda, S. et al. Molecular cloning and characterization of a novel human gene (HERNA) which encodes a putative RNA-helicase. <i>Biochim. Biophys. Acta</i> 1490, 163-169 (2000).	
BN	Misquitta, L. & Paterson, B.M. Targeted disruption of gene function in Drosophila by RNA interference (RNA-i): A role for nautilus in embryonic somatic muscle formation. <i>PNAS</i> 96, 1451-1456 (Feb. 1999).	
ВО	Montgomery, M.K. et al. RNA as a target of double-stranded RNA-mediated genetic interference in Caenorhabditis elegans. <i>PNAS</i> 95, 15502-15507 (Dec. 1998).	
BP	Montgomery, M.K. & Fire, A. Double-stranded RNA as a mediator in sequence-specific genetic silencing and co-suppression. <i>Trends Genet.</i> 14, 255-258 (1998).	
BQ	Mourrain, P. et al. Arabidopsis SGS2 and SGS3 Genes are Required for Posttranscriptional Gene Silencing and Natural Virus Resistance. <i>Cell</i> 101, 533-542 (2000).	
BR	Ngo, H. et al. Double-stranded RNA induces mRNA degradation in Trypanosoma brucei. PNAS 95, 14687-14692 (Dec. 1998).	
BS	Ratcliff, F. et al. A Similarity Between Viral Defense and Gene Silencing in Plants. Science 276, 1558-1560 (1997).	

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ВТ	Sanchez Alvarado, A. & Newmark, P.A. Double-stranded RNA specifically disrupts gene expression during planarian regeneration. <i>PNAS</i> 96, 5049-5054 (April 1999).
BU	Schneider, I. Cell lines derived from late embryonic stages of Drosophila melanogaster. <i>J. Embryol. Exp. Morpho.</i> 27, 353-365 (1972).
BV	Sharp, P.A. RNAi and double-strand RNA. Genes Dev. 13, 139-141 (1999).
BW	Shi, H. et al. Genetic interference in Typanosoma brucei by heritable and inducible double-stranded RNA. RNA 6, 1069-1076 (2000).
BX	Shuttleworth, J. & Colman, A. Antisense oligonucleotide-directed cleavage of mRNA in Xenopus oocytes and eggs. <i>EMBO J.</i> 7, 427-434 (1988).
BY	Sijen, T. & Kooter, J.M. Post-transcriptional gene-silencing: RNAs on the attack or on the defense? <i>Bioessays</i> 22, 520-531 (2000).
BZ	Smardon, A. et al. EGO-1 is related to RNA-directed RNA polymerase and functions in germ-line development and RNA interference in C. elegans. <i>Curr. Biol.</i> 10, 169-178 (2000).
CA	Smith, N.A. et al. Total silencing by intron-spliced hairpin RNAs. Nature 407, 319-320 (2000).
СВ	Tabara, H. et al. RNAi in C. elegans: Soaking in the Genome Sequence. Science 282, 430-432 (1998).
CC	Tabara, H. et al. The rde-1 Gene, RNA Interference, and Transposon Silencing in C. elegans. <i>Cell</i> 99, 123-132 (1999).
CD	Tavernarakis, N. et al. Heritable and inducible genetic interference by double-stranded RNA encoded by transgenes. <i>Nat. Genet.</i> 24, 180-183 (2000).
CE	Timmons, L. & Fire, A. Specific interference by ingested dsRNA. <i>Nature</i> 395, 854 (1998).
CF	Tuschl, T. et al. Targeted mRNA degradation by double-stranded RNA in vitro. <i>Genes Dev.</i> 13, 3191-3197 (1999).
CG	Vaucheret, H. et al. Transgene-induced gene silencing in plants. <i>Plant J.</i> 16, 651-659 (1998).
СН	Wassenegger, M. & Pelissier, T. A model for RNA-mediated gene silencing in higher plants. Plant Mol. Biol. 37, 349-362 (1998).
Ci	Waterhouse, P.M. et al. Virus resistance and gene silencing in plants can be induced by simultaneous expression of sense and antisense RNA. <i>PNAS</i> 95, 13959-13964 (Nov. 1998).
CJ	Wianny, F. & Zernicka-Goetz, M. Specific interference with gene function by double-stranded RNA in early mouse development. <i>Nature Cell Biol.</i> 2, 70-75 (2000).
СК	Wolf, D.A. & Jackson, P.K. Cell cycle: Oiling the gears of anaphase. <i>Curr. Biol.</i> 8, R636-R639 (1998).

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CL	Zamore, P.D. et al. RNAi: Double-Stranded RNA Directs the ATP-Dependent Cleavage of	
<u> </u>	mRNA at 21 to 23 Nucleotide Intervals. Cell 101, 25-33 (2000).	

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